

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of

Implementation of Section 255 of the  
Telecommunications Act of 1996

DOCKET # 96-198 ORIGINAL

WT Docket No. 96-198

Access to Telecommunications Services,  
Telecommunications Equipment, and Customer )  
Premises Equipment by Persons with Disabilities )

**REPLY TO OPPOSITIONS TO  
THE COUNCIL OF ORGANIZATIONAL REPRESENTATIVES (COR)  
PETITION FOR PARTIAL RECONSIDERATION**

Self Help for Hard of Hearing People, (SHHH) and the Alexander Graham Bell Association for the Deaf and Hard of Hearing (AGBell) submit reply comments in response to the Telecommunication Industry Association (TIA) and Multi-Media Telecommunications Association (MMTA) oppositions to the Council of Organizational Representatives (COR) petition for partial reconsideration of the provision of the FCC's rules addressing volume control.

SHHH's and AGBell's interest in this proceeding is exceedingly high and we support the original COR petition. Our constituency is the large number of people with hearing loss who need an adequate level of volume control on phones in order to have access to telecommunications. This population includes those people who use hearing aids or cochlear implants and those with hearing loss who use no technology. The increased level of volume control would benefit 4.6 million persons who use hearing aids but who do not have telecoils for

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use with hearing aid compatible phones; 1.2 million persons who have significant hearing loss, and benefit from both a telecoil and volume control; cochlear implant users; and 22 million people with hearing loss who do not use hearing aids. In addition it is important to keep in mind that in the next 10 years, there will be 40 million Americans with hearing loss due to the aging of the population.

Over the years we have received hundreds of comments from people on the need for higher volume control levels. Their main complaint is that the current level of volume control provided on phones is not strong enough to enable them to hear the incoming voice. Because of the fact that public telephones are often located in noisy environments (i.e. airports, train stations, restaurants, bars), many people require even greater amplification on public telephones than on their personal telephones. Such boost is important for individuals with a range of hearing losses (mild to profound) and various technologies. For example, many people with mild hearing loss (up to a 40 decibel loss) do not utilize hearing aids and hence require substantial boost. Many AGBell and SHHH members – children and adults – have cochlear implants. When making a telephone call, most cochlear implant users receive sound acoustically (rather than via a telecoil) and most cannot make a telephone call without the maximum level of telephone boost.

The range of 12-18dB boost, the existing rule, has been tried and tested for many years now and we know that it is insufficient for a significant population of people with hearing loss. The Access Board has recognized this and is proposing to take action to increase the volume control level of pay phones in the Americans with Disabilities Act Accessibility Guidelines. The FCC should act to ensure other phones can be used effectively by people with hearing loss.

TIA states that many phones, particularly those that operate solely on power from the telephone line, cannot support a receive volume control with 20dB of gain above the nominal level. We do not dispute that. Some phones cannot even support 12dB of gain. However, many phones can support a higher volume control boost, such as feature phones and pay phones. We should not reduce all phones down to the lowest common denominator. The key is in the early design stage to incorporate the need for a higher volume boost wherever it is readily achievable to do so, the standard used for the Telecommunications Act of 1996.

In its notice of proposed rulemaking, the Architectural and Transportation Barriers Compliance Board (Access Board) clearly states it intends to increase its volume control guidelines to a minimum of 20dB. In its petition for partial reconsideration, COR argued that because the FCC adopted the Access Board's guidelines for Section 255, the Access Boards proposal to increase its volume control guidelines was one reason, *inter alia*, for the FCC to follow suit.

TIA apparently misconstrued COR's position. Relying on the Access Board guidelines enacted in 1998, TIA contends that COR's argument is misplaced because the current Access Board guidelines limit the gain of public telephones to a maximum of 18dB. That is not the point. The Access Board proposed to change its current volume control guidelines because the present 12-18dB volume gain was simply not meeting the needs of many hard of hearing individuals. The Access Board is now proposing in its NPRM the following requirement: 704.3 Volume Control Telephones. Public telephones required to have volume controls shall be equipped with a receive volume control that provides a gain adjustable up to a minimum of

20dB. For incremental volume control, provide at least one intermediate step of 12dB of gain.

An automatic reset shall be provided.

As COR argued in its petition, because the Access Board is the lead agency entrusted to increase access of persons with disabilities, and because the FCC has adopted Section 255 guidelines as set forth by the Access Board, the Commission should follow the Board's lead and adopt similar volume control guidelines.

In response to TIA's request for clarification, COR assumes an unamplified normal (generally 85dB) level as the point of reference for measuring the requested 20dB of gain.

Contrary to TIA's assertions, increasing the volume control level may not cause distortion of the received signal. Based on testing commissioned by SHHH and conducted by two independent laboratories, (Harry Teder Ph.D., Consulting in Hearing Technology, Minnesota, and Harry Levitt, Ph.D., RERC on Hearing Enhancement and Assistive Devices, the Lexington Center, New York), this has not been found to be the case.

High gain phones, without special circuitry, currently on the market were tested that put out 90dB and 105dB at maximum volume setting. This is at least a 20dB gain over the standard 85dB. The sound was clear with no distortion. This shows that a 90dB and 105dB clean speech level is achieved with phones commercially available with no worse distortion levels than on public pay phones at normal levels. Therefore the distortion argument should not deter the FCC from setting allowable volume levels in line with the rules proposed by the Access Board. Further, with special circuits and transducers telephones could generate even higher sound pressure levels, above 20dB, without distortion.

Like TIA, SHHH and AGBell were parties to the Hearing Aid Compatibility (HAC) Negotiated Rulemaking that brought together all interested parties to make recommendations on regulations for the Hearing Aid Compatibility Act. We believe it was a successful process that resulted in more access to telecommunications for people with hearing loss without the unnecessary cost to government and business of retrofitting phones to be HAC. SHHH strongly urges the FCC to direct a similar process to bring together representatives of industry and consumer groups to work out how to provide an adequate level of volume control to benefit people with hearing loss that also works for telecommunications' manufacturers.

AGBell is a national membership organization comprised of parents of children who are deaf and hard of hearing, adults with hearing loss, and professionals who serve children with hearing loss. Over half of AGBell's members are parents.

SHHH is an educational association whose mission is to raise awareness and reduce the stigma attached to hearing loss through education, advocacy and self help. Over 80% of its members are hearing aids users.

Respectfully submitted,

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